



COUNTY OF SAN DIEGO  
**Great Government Through the General Management System – Quality, Timeliness, Value**  
DEPARTMENT OF HUMAN RESOURCES

CLASS SPECIFICATION

CLASSIFIED

EPIDEMIOLOGIST I	Class No. 004172
EPIDEMIOLOGIST II	Class No. 004173
SENIOR EPIDEMIOLOGIST	Class No. 004174

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■ CLASSIFICATION PURPOSE

To perform professional work involved in the detection of diseases afflicting human populations, disease patterns and prevalence, and their causes and control; and to perform related work as required.

■ DISTINGUISHING CHARACTERISTICS

Positions in these classes are found only in the Health & Human Services Agency (HHSA). Epidemiologists are public health professionals responsible for planning, organizing and coordinating disease detection programs, as well as monitoring, reporting, and controlling activities within the county. Epidemiologists act as intra- and inter-agency liaisons and consultants, and provide leadership to multi-disciplinary teams within the county.

Epidemiologist I:

This is the entry-level class in the epidemiologist series. Incumbents are responsible for a wide variety of disease reporting, identification, detection, and control activities. Under general supervision, incumbents assist higher-level classes with projects and assume progressively more difficult and critical disease surveillance, control and reporting program leadership duties.

Epidemiologist II:

This is the journey-level class in the epidemiologist series. Under general supervision, incumbents in this class are responsible for the planning, directing and coordinating activities of disease surveillance and control for one major program area such as food borne disease, a piece of a very large program such as AIDS, or several smaller programs.

Senior Epidemiologist:

This is the lead-worker class in the epidemiologist class series. Under general supervision, incumbents plan, direct and coordinate the activities for several disease surveillance, control and prevention programs. Incumbents may supervise lower level Epidemiologists and other professional level staff.

■ FUNCTIONS

**The examples of functions listed in the class specification are representative but not necessarily exhaustive or descriptive of any one position in the classes. Management is not precluded from assigning other related functions not listed herein if such duties are a logical assignment for the position.**

Epidemiologist I

Essential Functions:

1. Consults with multi-disciplinary personnel from Health and Human Services, other County departments, public and private community agencies and health providers to coordinate disease detection, surveillance, control, reporting, and eradication related activities.
2. Develops program proposals and working agreements in conjunction with health providers and community agencies to encourage high-risk people to be tested for the presence of reportable diseases or other diseases such as HIV.
3. Designs instruments for the collection and analysis of disease related data.
4. Conducts epidemiological studies associated with disease control.
5. Generates reports including progress reports of fieldwork.

6. Collaborates with inter-disciplinary personnel from other departments and public and private agencies to coordinate and augment case findings and surveillance and risk reduction activities based on analysis using established parameters.
7. Monitors service effectiveness to insure that programs meet established standards and may recommend actions to assure quality services.
8. Assists in identifying training needs of service providers relative to program issues.
9. Researches, prepares, and submits grant proposals.
10. May provide training to staff, students and volunteers.
11. May conduct informational programs to assist health care professionals, educators, social workers, and members of other groups in understanding the problems of target groups.
12. Provides responsive, high quality service to County employees, representatives of outside agencies and members of the public by providing accurate, complete and up-to-date information, in a courteous, efficient and timely manner.

#### Epidemiologist II

##### Essential Functions:

All the functions listed above and

1. Reviews laboratory and field work findings.
2. Develops and maintains effective program outreach efforts in assigned diseases.
3. Investigates and identifies, or helps to identify, previously unrecognized illnesses.
4. Evaluates data from hospitals, physicians and the public to trace the source(s) of disease clusters.
5. Arranges validation testing of specimens as needed.
6. Contacts appropriate departments/agencies such as the Medical Examiner, Occupational Safety and Health Agency, emergency medical service providers, hazardous materials responders and hospitals to alert and coordinate response efforts.
7. Prepares written communication, to alert or advise emergency rooms of disease outbreaks and provide critical information.
8. Recommends resource commitment and reallocation.
9. Prepares press releases on important or sensitive health issues.
10. May work with health officers from other countries such as Mexico.

#### Senior Epidemiologist

##### Essential Functions:

All the functions listed above and

1. Directs, plans and assigns work of several teams in multiple communicable disease programs.
2. Coordinates public health education efforts.
3. Acts as liaison with the Center for Disease Control (CDC) and State of California on assigned diseases.
4. Assesses disease detection, eradication, control and exclusion methods and recommends modification.
5. Plans, oversees and conducts training for project subordinates.
6. Coordinates with state, federal, and local health agencies to address program issues and maximize effort effectiveness.
7. Prepares scientific and technical reports, papers and presentations.
8. Makes official statements to state, local and public media groups.
9. Acts as subject matter expert to the local health services community and public.

## ■ KNOWLEDGE, SKILLS AND ABILITIES

### Knowledge of:

The following apply to all classes:

- Literature sources pertaining to epidemiology and communicable disease control.
- Epidemiological trends and disease patterns, their characteristics, and possible causation.
- Statistical theory, concepts, techniques and analyses used in epidemiological, demographic, health and bio-medical research.
- Review and evaluation techniques and methods.
- Methods of collecting, compiling and analyzing statistical and other research data.
- Interviewing techniques.
- Computer programming and processing methods to generate, organize, and display a wide variety of complex statistical and other research data.
- Accepted techniques of disease control.
- County customer service objectives and strategies.

### Epidemiologist II (in addition to the above):

- Human effects of environmental hazards and toxins.

### Senior Epidemiologist (in addition to the above):

- Principles of supervision and training.

### Skills and Abilities to:

The following apply to all classes:

- Organize and design an efficient plan for collecting and summarizing varied and complex field data.
- Apply mathematical formulas and make calculations necessary to select and apply appropriate statistical methods for collecting and summarizing varied and complex field data.
- Read and understand complex technical information in mathematical or diagrammatic form.
- Use tact and persuasion in eliciting information, explaining and advocating research objectives and methods.
- Plan, initiate and complete work assignments with minimal supervision.
- Explain technical information to staff and the public.
- Interpret and enforce laws and regulations relating to disease control.
- Prepare clear and concise technical reports for lay and professional readers.
- Communicate effectively orally and in writing.
- Establish effective working relationships with management, employees, employee representatives and the public representing diverse cultures and backgrounds.

### Epidemiologist II (in addition to the above):

- Lead and coordinate disease surveillance, detection, control and prevention programs for multiple projects and/or diseases.
- Evaluate social importance and fiscal impact of program efforts.
- Act as spokesperson for assigned programs.
- Participate effectively with the medical community, other public agencies, and community groups to address concerns, problems, and design effective program remedies.
- Prepare public information and educational material for the medical community and general public.
- Recommend, develop and implement effective and timely disease surveillance, exclusion, detection, eradication, and control measures.

### Senior Epidemiologist (in addition to the above):

- Plan, assign and supervise the work of others.
- Direct and lead interdisciplinary team efforts to implement procedures to detect, prevent and control disease for either a large complex program or several small programs that are complex and politically sensitive.

## ■ EDUCATION/EXPERIENCE

Education, training, and/or experience that demonstrate possession of the knowledge, skills and abilities listed above. Examples of qualifying education/experience are:

#### Epidemiologist I:

1. A master's degree from an accredited college or university with a major or specialization in epidemiology, bio-statistics, or a related field; OR,
2. A bachelor's degree from an accredited college or university in epidemiology, bio-statistics, public health, life science or related field, AND, three (3) years of experience in a public health, medical or community services agency, two (2) years of which must have included responsibility for designing instruments for collecting and analyzing epidemiological or demographic data, and interpreting findings pertaining to such data.

#### Epidemiologist II:

1. Two (2) years of experience as an Epidemiologist I in the County of San Diego; OR,
2. A master's degree from an accredited college or university with specialization in epidemiology, bio-statistics, or a related field, AND, two (2) years of professional epidemiology experience; OR,
3. A master's degree from an accredited college or university in health education or nursing administration, AND, three (3) years experience in public health medical care or community services, one (1) year of which must have been in designing, conducting and interpreting epidemiological or demographic data; OR;
4. A Ph.D. in epidemiology, public health, a life science or a related field from an accredited college or university.

#### Senior Epidemiologist:

1. One (1) year of experience as an Epidemiologist II in the County of San Diego; OR,
2. A master's degree from an accredited college or university with specialization in epidemiology, bio-statistics, or a related field, AND, five (5) years of professional epidemiology experience; OR,
3. A Ph.D. in epidemiology, public health, a life science or a related field from an accredited college or university, AND, two (2) years of professional epidemiology experience.

#### ■ ESSENTIAL PHYSICAL CHARACTERISTICS

**The physical characteristics described here are representative of those that must be met by an employee to successfully perform the essential functions of the classifications. Reasonable accommodation may be made to enable an individual with qualified disabilities to perform the essential functions of a job, on a case-by-case basis.**

Continuous upward and downward flexion of the neck. Frequent: sitting, repetitive use of hands to operate computers, printers and copiers. Occasional: walking, standing, bending and twisting of neck, bending and twisting of waist, squatting, simple grasping, reaching above and below shoulder level, and lifting and carrying files weighing up to 10 pounds.

#### ■ SPECIAL NOTES, LICENSES, OR REQUIREMENTS

##### License

A valid California class C driver's license, which must be maintained throughout employment in this class, is required at time of appointment, or the ability to arrange necessary and timely transportation for field travel. Employees in this class may be required to use their own vehicle.

##### Certification/Registration

None Required.

##### Working Conditions

Office environment; exposure to computer screens.

##### Background Investigation

Must have a reputation for honesty and trustworthiness. Misdemeanor and/or felony convictions may be disqualifying depending on type, number, severity, and recency. Prior to appointment, candidates will be subject to a background investigation.

Probationary Period

Epidemiologist I

Incumbents appointed to permanent positions in this class shall serve a probationary period of 6 months (Civil Service Rule 4.2.5).

Epidemiologist II and Senior Epidemiologist

Incumbents appointed to permanent positions in these classes shall serve a probationary period of 12 months (Civil Service Rule 4.2.5).

**New: October 23, 1987**

**Revised: October 7, 1998**

**Reviewed: Spring 2003**

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